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ABSTRACT

In response to the legislature's mandate to develop statewide curriculum standards for required subjects, this guide was developed by a statewide committee to present the content that should be taught in Business Arithmetic. It was piloted by teachers in representative school systems and subsequently revised. Eight goals for the course are listed, followed by a pacing chart suggesting the time to devote to each major topic in the course. The major topics concern the bank, the wage earner, the small business, the operations of the small business, the problems of business, the manufacturer, taxes, and stocks. The curriculum outline and performance objectives are then listed. In the following section, sample activities are presented, with content topic and objective noted for each. A brief list of books and resources is given, but no answer key is provided. (MNS)

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BUSINESS ARITHMETIC

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CURRICULUM GUIDE

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STATE OF LOUISIANA

DEPARTMENT OF EDUCATION

BUSINESS ARITHMETIC CURRICULUM GUIDE

BULLETIN 1612

1981

Issued by

Office of Academic Programs

J. KELLY NIX

State Superintendent

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*It may be beneficial for you to teach certain topics out of order - Example: Federal Income Tax may be taught during the tax season.

FOREWORD

Curriculum guides have been developed for grades K-8 at the elementary level and for each mathematics course at the secondary level. These guides represent the best thinking of a selected statewide committee established to determine the scope of mathematics content which should be taught at each level.

The mathematics curriculum guides are another segment of the total educational program established by this administration and mandated by the Legislature in both the accountability and assessment and the competency-based education laws. This educational program requires that specific skills and concepts be established for each grade level and for each subject area. The mathematics curriculum guides with course outlines, performance objectives and coordinated activities effect this phase of the program.

It is hoped that the mathematics curriculum guides will make a major contribution to the improvement of mathematics instruction in the schools of Louisiana. This series of mathematics curriculum guides is another step toward achieving the goals of this administration.

J. KELLY NIX

ACKNOWLEDGMENTS

The Statewide Mathematics Curriculum Committee is to be commended for its work in the development of the Mathematics Curriculum Guide Series, K-12. Leadership for this project was provided by Dr. Jean Reddy Clement, Section Chief, Mathematics Section, Bureau of Secondary Education.

Supervisors in the Bureau of Elementary Education working under the direction of Mrs. Bonnie Ross, Elementary Supervisor, developed the activities for the K-8 guide. The activities for the secondary mathematics guides were written by a committee of secondary mathematics teachers and Dr. Clement. These dedicated educators are to be commended for their enthusiasm in undertaking this formidable project and for the superb quality of their contributions to this unique and comprehensive Mathematics Curriculum Series.

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INTRODUCTION

Act 750 of the 1979 Louisiana Legislature established the Louisiana Competency-Based Education Program. One of the most important provisions of Act 750 is the mandated "development and establishment of statewide curriculum standards for required subjects for the public elementary and secondary schools of this state...." The "statewide curriculum standards for required subjects" is defined as "the required subjects to be taught, curriculum guides which contain minimum skills and competencies, suggested activities, suggested materials of instruction, and minimum required time allotments for instruction in all subjects." Act 750 further provides that the "effective implementation date of the statewide curriculum standards for required subjects shall be the 1981-82 school year. Development of such curriculum shall begin by the 1979-80 school year."

During the 1978-79 school year, curriculum guides were developed by advisory and writing committees representing all levels of professional education and all geographic areas across the State of Louisiana for the following mathematics courses: Algebra I, Algebra II, Geometry, Advanced Mathematics, and Trigonometry. The major thrust of the curriculum development process in each of the guides has been the establishment of minimum standards for student achievement. Learning expectancies for mastery have been determined for each course and/or grade level. In addition, content outlines, suggested activities, procedures, and bibliographies have been developed as aids in support of the learning expectancies. The curriculum guides also contain activities designed to stimulate learning for those students capable of progressing beyond the minimums.

During the 1979-80 school year, the curriculum guides were piloted by teachers in school systems representing the different geographic areas of the state as well as urban, suburban, inner-city, and rural schools. The standard populations involved in the piloting reflected also the ethnic composition of Louisiana's student population. Participants involved in the piloting studies utilized the curriculum guides to determine the effectiveness of the materials that were developed. Based upon the participants' recommendations at the close of the 1979-80 pilot study, revisions were made in the curriculum guides to ensure that they are usable, appropriate, accurate, comprehensive, relevant, and clear.

These curriculum guides were implemented statewide in the 1980-81 school year. This stage must be understood in its operational context. The curriculum developers and the participants in the pilot studies do not stand alone in the State of Louisiana. Ultimately, local system supervisors, principals, and classroom teachers will have the responsibility for attaining this goal.

Following the established curriculum development procedures, curriculum guides for Mathematics I, Mathematics II, Consumer Mathematics, Business Arithmetic, and Computer Science were developed in 1979-80 and piloted in 1980-81. These curriculum guides now are ready for full program implementation.

As curriculum guides are implemented, the following guidelines should prove helpful:

...curriculum standards should be considered as the foundation for the year's instructional program. Where other programs are already in operation, these curricular materials must be checked with the foundation curricula to ensure that appropriate course and/or grade level standards are included and maintained.

...curricular activities contained in the guides provide a number of suggestions for helping students to achieve the established standards. Activities to meet the needs of "average," "below average," and "above average" students have been included im the appropriate guides. These activities should prove helpful as the teacher plans and organizes instruction. Additional activities, however, may supplement or be used in lieu of those listed in the guide as long as these activities are designed to achieve similar specific objectives.

...curricular suggestions for meeting the needs of the special child have been prepared by the Division of Special Education. These suggestions are designed to provide help for teachers who work with special children in the regular classroom.

The continued effort of mathematics teachers to provide quality instruction will enhance our statewide goal to ensure that every student in the public elementary and secondary schools of the State of Louisiana has an opportunity to attain and to maintain skills that are considered essential to functioning effectively in society.

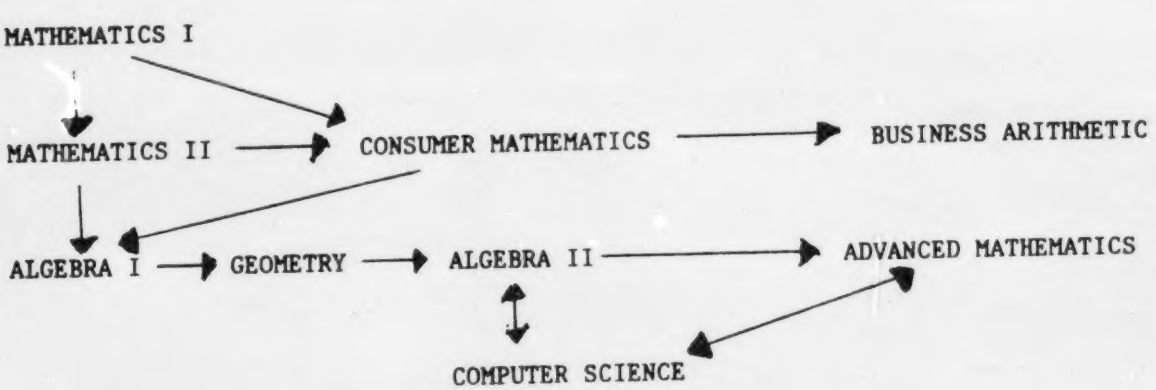
RATIONALE

Understanding the development of the entire set of mathematics curriculum guides is important to the proper use of the guides. This understanding is especially vital to the proper placement of students in the areas of Mathematics I, Mathematics II, Consumer Mathematics and Business Arithmetic. To avoid unnecessary duplication and repetition of content, the writing committee selected those topics which were deemed most appropriate for each of these courses. These topics were then eliminated from the content of the other courses or were treated with less emphasis.

Teachers and counselors need also to be aware of the difficulty levels of these courses. Mathematics I is the most fundamental course and is designed for those students entering ninth grade who have not acquired the basic skills in arithmetic. The stronger students who are still not quite prepared for success with Algebra I upon entering ninth grade should be encouraged to schedule Mathematics II. Mathematics II is designed to strengthen mathematical background and to prepare students for Algebra I and Geometry. Every student who plans to go to college should take Algebra I (at least). It is recommended that they also take Geometry and Algebra II.

Consumer Mathematics, as the name indicates, treats that mathematics which each of us encounters routinely as a citizen and consumer. The content differs from that of Business Arithmetic in that Business Arithmetic approaches the topics from the viewpoint of an employer or one engaged in business or manufacturing. It is not recommended that a student who has successfully completed Algebra II be allowed to take Mathematics I or Mathematics II.

The accompanying diagram should aid in understanding some possible avenues a student may take in his secondary mathematics career.



GOALS

Upon completion of a secondary course in Business Arithmetic, the student will be able to:

1. Keep personal money records and account balances.
2. Understand wage rates and salary deductions.
3. Prepare records for a small business.
4. Understand the buying and selling procedures of a small business.
5. Solve problems relating to business costs and to distributing income for a partnership or corporation.
6. Develop an awareness of the problems of a manufacturer.
7. Understand taxing procedures and preparation of a Federal income tax form.
8. Understand the buying and selling of stocks.

PACING CHART

I. Bank - 9 Weeks

II. Wage Earner - 4 Weeks

III. Small Business - 2 Weeks

IV. Operations of Small Business - 5 Weeks

V. Problems of Business - 2 Weeks

VI. Manufacturer - 2 Weeks

VII. Taxes - 8 weeks*

VIII. Stocks - 1 Week (Optional)

*Six weeks are allowed for the teaching of income tax.

CURRICULUM OUTLINE AND PERFORMANCE OBJECTIVES

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
I. The Bank	
A. Personal Money Records	A. To demonstrate a basic understanding of personal banking procedures, the student will be able to:
1. Checkbook Records	1. Prepare forms for checkbook records by:
a. Deposit slips	a. Using deposit slips;
b. Stub records	b. Writing checks and completing check stub records.
2. Checkbook Balance	2. Prove his checkbook balance by:
a. Bank statement	a. Comparing the bank statement and canceled checks with his checkbook record;
b. Outstanding checks	b. Identifying and computing the total of the outstanding checks;
c. Reconciliation statement	c. Compiling information and computing the balance on a reconciliation statement form.
B. Savings Plans	B. To illustrate a basic understanding of savings plans and earned income involved in these plans, the student will be able to:
1. Savings Accounts	1. Complete deposit forms, withdrawal forms and transactions necessary for:
a. Passbook	a. Maintaining a current passbook record;

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
1. Savings Account (Continued)	
b. Interest	b. Calculating simple interest earned;
c. Compound interest	c. Calculating compound interest using compound interest tables;
2. Special Savings Plans	2. To illustrate a basic understanding of special savings plans and earned income involved in these plans, the student will be able to:
a. Certificates of deposit	a. Determine the difference in interest earned on certificates of deposit and passbook savings;
b. Money markets	b. Determine feasibility of money market investments;
c. Other savings plans	c. Determine feasibility of other savings plans.
C. Borrowing Money	C. To demonstrate a basic understanding of types of lending agencies and borrowing procedures, the student will be able to:
1. Promissory Notes	1. Identify, complete and read desired information from the note to:
a. Discounting	a. Calculate the discount on a note;
b. Proceeds	b. Determine the proceeds on a note.
2. Interest	2. Apply terminology and utilize formulas to:
a. Simple	a. Calculate simple interest on a business transaction;

CURRICULUM OUTLINE	PERFORMANCE
2. Interest (Continued)	
b. Compound	b. Determine compound interest or future value of money using computations or compound interest tables;
c. Annual percentage rate - APR	c. Calculate the annual percentage rate on loans and installment purchases.
3. Borrowing on Collateral	3. Define collateral in its different forms and:
a. Collateral notes	a. Identify the collateral used or desired information from the face of the note;
b. Demand notes	b. Find the amount due on the date of settlement;
c. Mortgages	c. Determine the interest and total amount due at a specific time;
4. Other Lending Agencies	4. Select the best type of lending agency for a particular need, such as credit unions, commercial banks, finance companies, etc.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
II. The Wage Earner	
A. Wages	A. To demonstrate a basic understanding of the concepts relating to wage earning, the student will be able to:
1. Hourly rate	1. Compute wages earned on an hourly rate basis;
2. Regular time and overtime	2. Compute wages that involve overtime;
3. Time clock and timecard	3. Figure hours worked and earnings from the timecard;
4. Piece-work	4. Compute wages based on piece-rate;
5. Deductions	5. Calculate net wages that involve deductions:
a. Income tax	a. By using a withholding tax table;
b. FICA tax	b. By using a social security tax table or the tax rate method;
c. Insurance	c. For personal insurance;
d. Miscellaneous	d. For fund drives, dues, garnisheeing of wages, etc.
B. Commissions	B. To determine wages based on commissions, the student will be able to:
1. Straight commission	1. Find the amount of pay if the rate is based on quantity sold or value of sales;
2. Salary and commission	2. Find the amount of pay given a fixed salary plus commission;

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
B. Commissions (Continued)	
3. Graduated commission	3. Compute the total commission if several commissions are involved;
4. Commission formula	4. Determine the rate of commission or amount of sales using the formula R = C ÷ S;
5. Commission and net proceeds	5. Compute an agent's commission and the net proceeds received by the principal.
C. Income Problems	C. To demonstrate a basic understanding of personal finance, the student will be able to:
1. Personal cash record	1. Compile and total a monthly and yearly cash record;
2. Personal budget problems	2. Determine expenditures based on earnings.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
III. The Small Business	
A. The Balance Sheet	A. To demonstrate a basic understanding of the financial structure of a business, the student will be able to prepare a balance sheet and:
1. Assets	1. Determine the assets using the formula A = L + P or from the balance sheet;
2. Liabilities	2. Determine the liabilities from the balance sheet or the formula A = L + P;
3. Proprietorship	3. Determine the proprietorship from the balance sheet or the formula A = L + P.
B. The Income Statement	B. To demonstrate a basic understanding of the operation of a business, the student will prepare an income statement and be able to:
1. Net sales	1. Figure net sales;
2. Gross profit	2. Calculate gross profit;
3. Cost of goods sold	3. Determine the cost of goods sold;
4. Net income or loss	4. Determine and identify net income or net loss;
5. Statement analysis	5. Make a percentage analysis of the major items on the income statement.
C. The Payroll	C. To demonstrate a basic understanding of the employee payroll, the student will be able to:
1. Payroll register	1. Prepare a payroll register from the information on the timecard and other records;

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
C. The Payroll (Continued)	
2. Individual earnings records	2. Prepare an individual earnings record for an employee.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
IV. The Operations of the Small Business	
A. The Retailer - Buying	A. To demonstrate a basic understanding of buying procedures and transactions, the student will be able to:
1. Purchasing Merchandise	1. Find the total cost and due date of purchased goods by:
a. Invoices	a. Calculating extensions and finding the total amount due on a purchase invoice;
b. Due date	b. Counting ahead from the date of the invoice using the terms stated on the invoice.
2. Trade Discounts	2. Apply the discount formula Rate x List Price = Discount to:
a. Single discounts	a. Calculate the discount and invoice price when a single discount is given;
b. Rate of discount	b. Determine the rate of discount;
c. Discount series	c. Calculate the total discount and invoice price when several discounts are given.
3. Cash Discounts	3. Apply the discount formula Rate x Invoice Price = Cash Discount to:
a. Cash discount and cash price	a. Calculate the cash discount and cash price;
b. Rate of cash discount	b. Determine the rate of cash discount.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
A. The Retailer - Buying (Continued)	
4. Buying Expense	4. Determine the total cost of purchased goods by:
a. Cost of item	a. Finding invoice price or cash price;
b. Cost of transportation	b. Finding the cost of transportation;
c. Formula application	c. Applying the formula Price + Expenses = Total Cost.
B. The Retailer - Selling	B. To demonstrate a basic understanding of marketing procedures and transactions, the student will be able to:
1. Sales records	1. Prepare a daily sales summary and prove the totals;
2. Retail discounts	2. Apply the formula for discounts to:
a. Rate of discount	a. Calculate the rate of discount;
b. Selling price	b. Calculate the selling price.
3. Profit on Sales	3. Apply appropriate formulas to:
a. Gross profit	a. Calculate gross profit;
b. Net profit	b. Determine the net profit;
c. Rate of markup	c. Compute the rate of markup and the rate of net profit based on the selling price of an article.
4. Pricing Goods	4. Find the price of an article given:
a. Sales price basis	a. The selling price and rate of markup;
b. Cost price basis	b. The cost and rate of markup.

CURRICULUM OUTLINE	PERFROMANCE OBJECTIVE
C. Warehouse and Distribution	C. To demonstrate a basic understanding of warehouse and distribution practices, a student will be able to:
1. Storage space	1. Calculate the number of cubic feet needed to store specific merchandise.
2. Inventory	2. Demonstrate a basic understanding of inventory procedures by:
a. Taking inventory	a. Determining the number of each item that your business has in stock;
b. Valuing inventory	b. Calculating the value of inventory in stock;
c. Carrying inventory	c. Determining the inventory needed to meet production.
3. Transportation	3. Calculate the total cost of transporting inventory.
D. Management Practices	D. To demonstrate a basic understanding of management practices, the student will be able to:
1. Coding goods	1. Develop, read and apply codes;
2. Bankruptcy	2. Solve problems relating to bankruptcy.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVE
V. The Problems of Business	
A. Business Costs	A. To recognize cost of office operations of a business, the student will be able to:
1. Building rental	1. Determine the cost of renting or leasing a building or portion of a building.
2. Maintenance and improvement of buildings	2. Determine the total cost of maintaining and improving the buildings.
3. Utilities	3. Calculate the cost of utilities.
4. Office equipment and supplies	4. Solve problems relating to office equipment and supplies.
5. Office labor	5. Determine the cost of office labor.
6. Professional services	6. Determine the cost of consultants.
7. Advertising	7. Calculate the cost of advertising using different media.
8. Insurance	8. Determine the cost of basic insurance.
B. Distributing Partnership Income	B. To demonstrate a basic understanding of business income, the student will be able to recognize and apply the methods of distributing income of a partnership.
C. Distributing Corporation Income	C. To demonstrate a basic understanding of business income, the student will be able to recognize and apply the methods of distributing income of a corporation.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
VI. The Manufacturer	
A. Cost of Manufacturing	A. To demonstrate an awareness of the cost involved in manufacturing, the student will be able to:
1. Cost elements	1. Solve problems relative to cost elements;
2. Distributing expenses	2. Calculate distribution of factory expenses.
B. Pricing Articles	B. To demonstrate an understanding of the factors involved in pricing manufactured articles, the student will be able to:
1. Gross profit	1. Determine gross profit;
2. Net profit	2. Calculate net profit.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVE
VII. Taxes	
A. Property	A. To demonstrate a basic understanding of property taxes, the student will be able to calculate the amount to be raised by the property tax and to calculate the tax rate.
B. Sales and Excise	B. To demonstrate a basic understanding of sales and excise taxes, the student will calculate the sales or excise tax and the total cost to the buyers.
C. Social Security	C. To demonstrate a basic understanding of the F.I.C.A. tax, the student will determine the employees and employers tax.
D. Federal Income	D. To demonstrate a basic understanding of the preparation of a Federal income tax return, the student will be able to:
1. Total income	1. Determine total income;
2. Standard deduction	2. Determine standard deduction
3. Exemptions	3. Determine the number and amount for exemption;
4. Taxable income	4. Find the taxable income;
5. Taxes paid	5. Find the tax amount due from a table and tax credit information.
6. Refund	6. Find the balance or refund due.
7. Income tax forms	7. Complete Forms 1040 and 1040A, filing both a single and joint return.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
VIII. Stocks (Optional)	
A. Total Investment	A. To demonstrate a basic understanding of stock investment, the student will calculate the total investment.
B. Stock Quotations	B. To demonstrate a basic understanding of stock quotation, the student will read the daily stock quotation tables.
C. Stock Income and Profit	C. To demonstrate a basic understanding of stock income and profit, the student will calculate the total income and total profit on a given stock.
D. Sale of Stocks	D. To demonstrate a basic understanding of sales of stocks, the student will quote the loss or gain of a given stock.

ACTIVITIES

ACTIVITIES

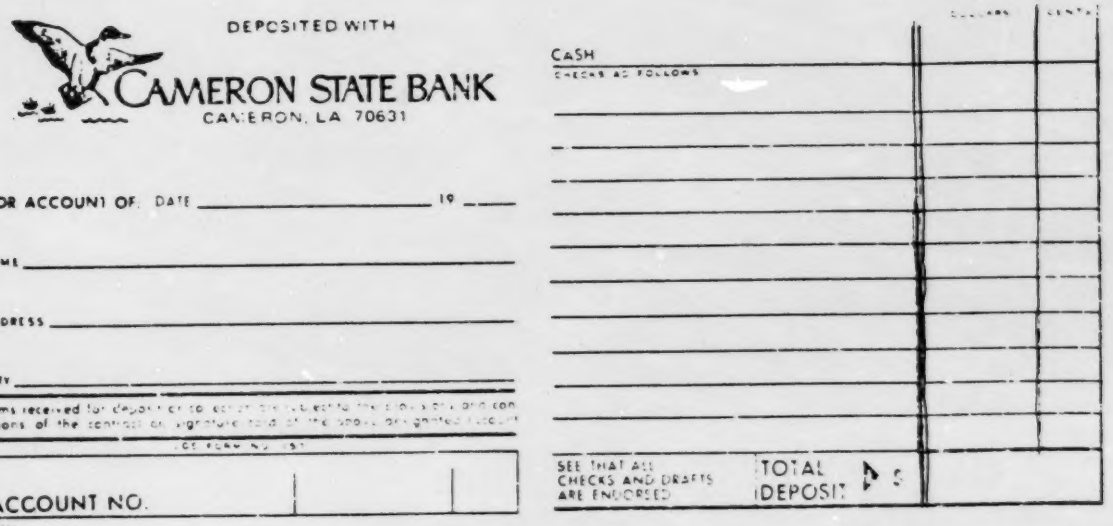
I. A. (1, 2) CONTENT: The Bank, Personal Money Records

OBJECTIVE: The student will be able to prepare and maintain checking account records.

ACTIVITIES: a) Complete the following problems:

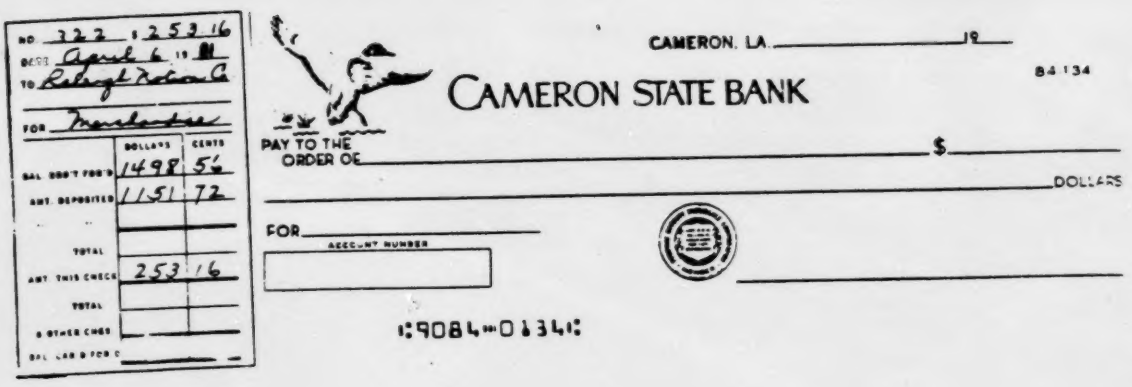
1. Complete the deposit form using your name, address and current date and the following items:

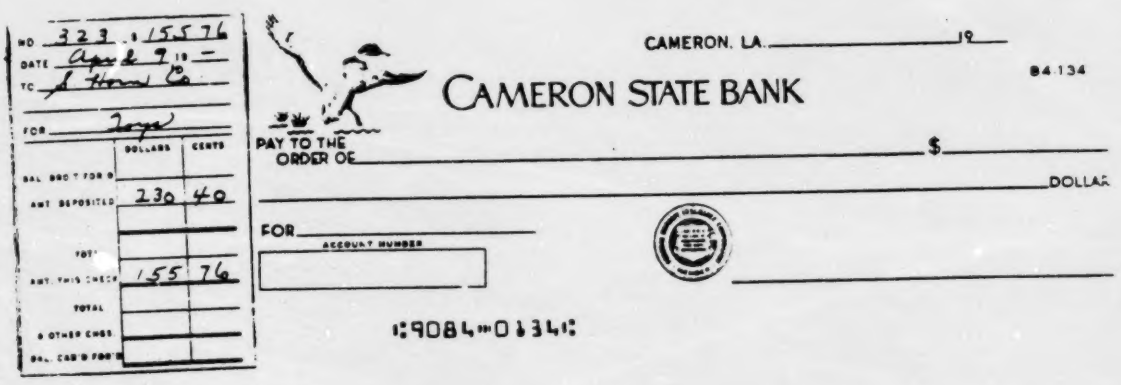
   Three (3) ten dollar bills, four (4) one dollar bills, and Checks: #12039 for $59.95; #987899 for $2.50; #57892 for $17.80.



I. A. (CONTINUED)
(1, 2)

ACTIVITIES: 2. Complete the following checks and stubs for the indicated transactions.





I. A. (CONTINUED)

ACTIVITIES: 3. Eric Young's bank statement, dated December 31, showed a balance of $2,726.86. His checkbook balance was $1,815.60. There were three outstanding checks: No. 309, $170.70; No. 315, $39.16; and No. 331, $207.60. The bank made a service charge of $4.20. A $700 note was collected by the bank and credited to Young's account. A deposit totaling $202, made the last day of the month, had not been credited. Reconcile the bank and checkbook balances.

Bank Balance	$_____	Checkbook Balance	$_____
Deduct Outstanding Checks		Deduct Service Charge	_____
No. 309 $_____			
No. 315 _____			
No. 331 _____	_____		
	$_____		
Add Deposit not Credited	_____	Add Note Collected by Bank	_____
Adjusted Bank Balance	$_____	Adjusted Checkbook Balance	_____

I. B. (1, 2) CONTENT: The Bank, Savings Plans

OBJECTIVE: The student will be able to prepare and maintain savings account records.

ACTIVITIES:

a) Solve the following problems. (Assume a year has 360 days.)

1. On January 2, Howard deposited $600 in a savings bank that pays 6% interest a year and added the interest on April 1, July 1, October 1, and January 2 of each year. If he made no deposits or withdrawals, how much did he have on deposit on the following January 2? _____

2. Using a compound interest table, calculate the interest on a deposit of $1,100.00 compounded quarterly at 6% for 4 years.

3. Contact local financial institutions (banks, savings and loan, etc.) for current information pertaining to Certificates of Deposit and Money Market Certificates.

   Write a report comparing these types of savings plans with regular passbook accounts.

I. C. (1, 2, 3, 4)

CONTENT: The Bank, Borrowing Money

OBJECTIVE: The student will be able to solve problems pertaining to borrowing money.

ACTIVITIES:

a) Solve the following problems. (Assume a year has 360 days.)

1. Find the discount and proceeds in each of the following notes.

	Face of Note	Time to Run	Date of Note	Discount Rate	Amount of Discount	Proceeds
a)	$200.00	2 Months	July 17	6%	_____	_____
b)	$364.00	60 Days	August 8	5-3/4%	_____	_____
c)	$286.75	6 Months	January 3	7%	_____	_____

2. On June 30, Paul DuBois borrowed $750 from the Cameron State Bank, giving the bank his four-month note for the amount. The note was dated June 30, and the interest rate was 7%. When was the note due?_____
How much did Paul pay for the note?_____

3. Date of Maturity

State the date of maturity on each of the following notes: (Assume February has 28 days.)

	Date	Time	Date of Maturity
a)	April 7	1 Month	_____
b)	May 21	60 Days	_____
c)	October 3	2 Months	_____
d)	August 31	45 Days	_____

4. Mrs. Murdox wishes to have a fund of $15,000 available when she retires in 20 years. How much must she invest each month at 5% compounded quarterly, in order to achieve this goal?

I. C. (CONTINUED)

5. Find the compound amount and compound interest, using a compound interest table, if $2,000 is compounded quarterly at 5% for 2½ years.

6. Karen repaid a $1,000.00 loan in 30 monthly payments of $45.20 each. Find the annual percentage rate (APR) on this loan.

7. A demand note of $900, dated on September 7, was settled in full on November 21, with interest at 6%. What was the amount due on the date of settlement?

8. A mortgage of $5,000 requires a quarterly payment of $82.00 on the principal. Find the amount of the unpaid balance in force during the first, second and third quarters.

9. Contact your local lending institutions and write a report selecting the best type of lending agency for a particular need.

II. A. CONTENT: The Wage Earner, Wages

OBJECTIVE: The Student will be able to compute the hours worked, wages earned on an hourly rate, overtime, and piece-rate basis.

ACTIVITIES: a) Complete the wages earned in the following:

1. Paul Moore worked the following number of hours during one week: Monday 7, Tuesday 8, Wednesday 7½, Thursday 8, Friday 8. If his hourly salary was $3.50 what should his salary be for that week?

2. Carl Jones is paid $3.25 an hour for a 40-hour week. For overtime, he is paid time and a half. Last week he worked 45 hours. How much did he earn?_____

3. Mr. Womack is required to keep a weekly time-card. The total hours he works each day must be rounded down to the nearest quarter hour. His regular hours are 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m.

Mr. Womack Rate $3.00 an Hour				
	In	Out	In	Out
Monday	7:58	12:01	12:59	5:02
Tuesday	8:12	12:02	12:58	5:01
Wednesday	7:59	12:00	1:08	5:01
Thursday	8:00	12:03	12:57	5:02
Friday	8:18	12:01	12:59	5:00

Total hours worked _____.

Total earnings _____.

4. The Jones Import Company pays a bonus for all pieces over a standard minimum set for the job. Find the daily earnings:

	Name	Piece Rate	Bonus Rate	Standard Minimum	Pieces Produced	Rejected Pieces	Daily Earnings
a)	J. Dow	$ .15	$ .05	200	250	10	_____
b)	A. James	.60	.20	50	60	0	_____

II. A. (5)

CONTENT: The Wage Earner, Deductions

OBJECTIVE: The student will be able to calculate net wages that involve payroll deductions.

ACTIVITIES: a) Compute the take-home pay in the following:

1. Henry works on an 8-hour day basis at $4.80 an hour with time and a half for overtime. Last week he worked the following number of hours: Monday 11, Tuesday 6, Wednesday 8, Thursday 10, Friday 7. His employer deducted $9.70 for FICA tax, $21.50 for withholding tax, $18.75 for savings bond and $11.15 for insurance. How much did Henry receive as take-home pay?

II. B. (1, 2, 3, 4, 5)

CONTENT: The Wage Earner, Commissions

OBJECTIVE: The student will be able to solve problems involving commissions.

ACTIVITIES: a) Solve the following problems.

1. What is the amount of commission for each of the following salesmen?

Salesman	Number Sold	Commission on Each	Total Commission
A	240 Brushes	25¢	_____
B	167 Pans	98¢	_____
C	6 Vacuum Cleaners	$123	_____

2. What is the amount of commission on a total sale of $11,700, if the commission rate is 7½%?

3. A salesman may be paid a salary plus a commission. The commission may be a percent of the total sales. What is the total earnings for each salesman?

Salesman	Salary	Total Sales	Rate of Commission	Income From Commission	Gross Earnings
D	$200	$3,000	4%	_____	_____
E	250	2,500	6%	_____	_____

4. Mr. Lee, a salesman, receives a monthly salary of $350, plus a 1% commission on all sales, and an additional 2% on monthly sales of $5,500. For the month of July, his sales were $9,000 and for August, $7,560. What was his total income for the two months?_____

5. A salesman received $900 in commission on a sale of $12,000. Find the rate of commission.

6. Bobby Franks, a real estate agent, sold a house and lot to Ed Jones for $16,500. He charged 4% for commission and $135 for other expenses connected with the sale of the property. What was Mr. Franks' commission?_____

   What was Mr. Jones' net proceeds from the sale of the property?_____

II. C. (1) CONTENT: Income Problems, Personal Cash Records

OBJECTIVE: The student will be able to compile and compute balances of cash records.

ACTIVITIES: a) Complete the following cash records.

1. Ivan Steinbeck received cash during the week of June 1-7 as follows: part-time wages $120.00, tips $109.50, rummage sale $87.50, refund on auto part $36.25, winnings at the race $40.80. Make the proper entries on the cash receipts record.

CASH RECEIPTS RECORD			
DATE	EXPLANATION	AMOUNT	
	TOTAL		

II. C. (CONTINUED)

2. Ivan Steinbeck paid the following bills during the week of June 1-7: car payment $51.25, car repair $28.95, rent $45.00, food $38.00, gas and oil $23.75, entertainment $26.00. Make the proper entries on the cash payments record.

CASH PAYMENTS RECORD			
DATE	EXPLANATION	AMOUNT	
	TOTAL		

3. Did Ivan's receipts exceed his payments? If so, by what amount?

II. C. (CONTINUED)

Cash Receipts for the month of May 19 80

DATE	RECEIPTS	EXPENDI-TURES	1 FOOD	2 CLOTHING	3 HOUSING	4 TRANSPOR-TATION	5 PERSONAL	6 SAVINGS
May	896.75		294.72	66.63	295.00	116.60	31.71	

In the above cash record summary:

a) Determine the total expenditures and savings for the month.

b) If the amounts in the summary represent average monthly expenditures, find the total receipts, expenditures and savings for the year.

II. C. (2) CONTENT: Income Problems, Personal Budget Problems

OBJECTIVE: The student will be able to use a cash record summary and determine expenditures based on the earnings.

ACTIVITIES: 1. The Jones family estimates that its total cash income for the coming year will be $6,600. The family plans to budget the income shown below. Show in the blank spaces the amount to be budgeted for each item.

Food . . . . 1/4 or _____ Operating . . . 9/40 or _____

Clothing . . 1/6 or _____ Development . . 3/40 or _____

Housing . . 1/5 or _____ Savings . . . . 1/12 or _____

II. C. (CONTINUED)
(2)

2. Earl Nelson receives a monthly take-home pay of $500. His expenses for a month are shown below. Find what fractional part of the total take-home pay was spent for each item and write the fraction in the blank. Find what percentage of the total take-home pay was spent on each item and write the percent in the blank.

Food . . .	$150 or _____	Operating . . .	$90 or _____
Clothing .	$ 75 or _____	Development . .	$60 or _____
Housing .	$100 or _____	Savings	$25 or _____

III. A. CONTENT: The Small Business, The Balance Sheet

OBJECTIVE: The student will be able to prepare and utilize a balance sheet.

ACTIVITIES: Solve the following problems.

1. Arnold Jones, owner of Star Bakery, has assets valued at $12,764 and liabilities amounting to $1,957. What is the amount of Arnold's capital?_____

2. Grace Roberts, owner of Grace's Card Shop, has assets valued at $26,243 and proprietorship of $19,280. What is the amount of her liabilities?_____

3. Prepare a Balance Sheet for the following small businesses: (Use the form for the Balance Sheet.)

   Gene Smith, owner of Cameron Clothing Store, has the following inventory on hand: cash, $3,864; merchandise inventory, $31,620; store supplies, $420; land and building $24,700; store equipment, $8,620. He owes the Cohen Apparel Co. $1,343; Marcus Brothers, $894; and Adams Textile Co. $1,188. Prepare a Balance Sheet for the month ending December 31, 19 ___.

_____

_____

_____

III. B. (1, 2, 3, 4,

CONTENT: The Small Business, The Income Statement

OBJECTIVE: The student will be able to prepare and utilize an income statement.

ACTIVITIES: 1. Complete the following to find gross profit, net profit or loss.

CO.	NET SALES	COST OF GOODS SOLD	GROSS PROFIT	OPERATING EXPENSE	NET PROFIT	NET LOSS
A	$1,000	$ 620		$ 310		
B	3,000	2,100		600		
C	5,000	3,000		2,200		

2. In filling an order for 940 hats at $3.75 each, the manufacturer had the following costs: material, $832.25; labor, $942.68; overhead, $312.90. The manufacturer's gross profit on the order was _____. The average factory cost per hat was _____.

3. Use the blank form to prepare the following income statements.

   The Kandy Kane Shop has the following data on its operations for this year: net sales, $107,200; inventory, January 1 - $19,700; purchases during the year, $69,800; inventory at the end of year, $21,600. Prepare an income statement for year ending December 31, 1980.

_____

_____

_____

III. B. (CONTINUED)
(1, 2, 3, 4,

4. John's Mend-It business had net sales of $35,000. The cost of goods sold was $18,500, and the gross profit was $16,500.

   a) The cost of goods sold was what percent of net sales?

   b) The gross profit was what percent of net sales?

III. C. (1, 2)

CONTENT: The Small Business, The Payroll

OBJECTIVES: The student will be able to prepare a payroll register and individual earnings record.

ACTIVITIES: Solve the following problems.

1. Complete the following payroll register. Time and a half is paid for overtime. Use tables to determine FICA and income taxes.

PAYROLL REGISTER WEEK ENDED JUNE 1, 1980

Name	No. Exemptions	Total Hours Reg.	Total Hours O.T.	Hour Rate	Total Earnings	Deductions FICA	Fed. Inc.	Group Inc.	Hosp.	Total	Net Pay
J. Jones	3	40	4	$7.15				$1.90	$10.12		
J. Doe	2	40	0	$6.50				$1.90	$ 7.50		
P. Thorn	1	40	3	$3.90				$1.90	$10.12		
TOTALS											

IV. A. (1, 2, 3, 4) CONTENT: The Operation of the Small Business, Buying

OBJECTIVE: The student will be able to solve problems relating to buying goods.

ACTIVITIES: Solve the following problems.

1. The billing clerk of Leach's Auto Co. prepared the following invoice.

   Complete the invoice by making the extensions and show total of the invoice, and find the date due. Sales tax is 5%.

I N V O I C E

L E A C H ' S
A U T O
C O.

DATE December 11, 1980

SOLD TO

Lake Parts
1701 Lake St.
Lake Charles, La. 70605

Our No. 8103

Cust. Order No. C411

Terms Net 30 Days

Shipped Via Bus

Quantity	Description	Unit Price	Amount
12	Shock Absorbers, No. 61-B31	$7.35	.....
15	Shock Absorbers, No. 61-B48	5.85	.....
18	Ignition Coils, No. 88-C20	4.20	.....
	Sub Total		.....
	Sales Tax		.....
	TOTAL		.....

IV. A. (CONTINUED)
(1, 2,
3, 4)

2. The Home Builder's Supply buys shower cabinets listed at $95 less discounts of 20%, 10% and 5%. The invoice price is _____.

3. What single rate is the equivalent of the rate series 15%, 10% and 10%?

4. What is the rate of discount given if a $50.00 coat is on sale for $40.00?

5. Find the trade discount and the net price of each of the following:

Item	List Price	Rate of Discount	Trade Discount	Net Price
A. Paint Sprayer	$80.00	10% & 5%		
B. Electric Grinder	$80.00	15%		

6. Find the amount paid for testing equipment listed at $180, subject to discounts of 20% and 10% and to terms of 8/10, 3/30, n/60. The merchandise was purchased on May 28 and paid for on June 8. _____

7. The air express rate on a 140-pound shipment to Los Angeles is $17.69 a hundred pounds. Find the total shipping cost. _____

8. Complete the following: (Shipping cost amounts to 3% of the list price.)

List Price	Trade Discount	Cash Discount	Date of Inv.	Date Paid	Trade Discount	Cash Discount	Price	Shipping	Total Cost
a. $5,380	20% & 5%	3/10, n/60	6/28	7/5					
b. $8,000	12½% & 10%	5/30, n/60	2/19	3/1					
c. $2,400	30% & 20%	10/10, n/30	6/18	6/22					

IV. B. (1, 2, 3, 4)

CONTENT: The Operation of the Small Business, Selling

OBJECTIVE: The student will be able to solve problems relating to selling merchandise.

ACTIVITIES: Solve the following problems.

1. Complete the following daily sales summary and prove totals.

Daily Sales Summary
October 1, 1979

Department	Cash Sales	Charge Sales	Total Sales
Clothing	$3,050.00	$1,790.80	
Footwear	$979.50	$115.30	
Accessories	$309.79	$63.00	
TOTALS			

2. A store sells a TV for $449.00 that is regularly priced at $599. What is the rate of discount?

3. Radios are on sale at 35% discount. What is the sale price of a radio which regularly costs $50.00?

4. The Tall & Short Shop bought a job lot of 300 pantsuits for $4,500 and paid $50 transportation charges. The store sold 110 suits at $39.95, 70 at $30.00 and the remainder at $25.00. What was the gross profit?

5. The Candy Shoppe buys a box of candy for $2.53 and sells it for $5.75. The Shoppe figures its operating expenses at 25% of the net sales. What net profit is made on each box of candy?

IV. B. (CONTINUED)
(1, 2, 3, 4)

6. The Jean Shop pays $9.40 for a pair of jeans and sells it for $14.95.

   a) The markup is what percent of the selling price?

   b) The markup is what percent of the cost of the article?

7. Marcus Mudd, owner of a men's wear store, wishes to stock a line of shirts that he can retail at $4.45. His expenses average 34% of the selling price. His markup must be ____% of the selling price. What was his markup on each shirt? _____

8. If a dealer pays $8.50 for an article and desires to realize a markup of 32% on the selling price, the lowest price at which he should sell the article is _____.

9. By buying a model helicopter for $29 and selling it for $44.95, the Bell Hobby Shop realized a gross profit of _____, which was _____% of the cost price?

10. The Guidry Builders Supply Company pays $11.25 each for stepladders. If the company desires 56% markup on the cost, it should sell the ladders at _____ each.

IV. C. (1, 2, 3) CONTENT: Operation of the Small Business, Warehouse and Distribution

OBJECTIVE: The student will be able to solve problems relating to storage space, inventory and transportation.

1. Office Equipment Company manufactures file cabinets. Each cabinet is stored in a box measuring 4 feet high, 1.5 feet wide, and 2.5 feet long. How many cubic feet of space does Office Equipment need to store 1700 file cabinets?

2. How many StraightAway models does Clarion Motor Coach have on its lot on October 1?

Item: StraightAway
Stock Number: JR2201F

Month of:	Opening Balance	Receipts	Issues	Inventory at End of Month
August	65	5	20	?
September	?	6	22	?
October	?			

3. Down-Home Overalls took inventory of its heavy cotton overalls. On March 1, Down-Home had 40 pairs of heavy cotton overalls in stock. What is the value of the inventory on March 1?

Item: Heavy Cotton Overalls
Stock Number: 3251

Date		Receipts	Unit Cost	Total Cost
February 1	Opening bal.	30	$15.00	$450.00
February 18		50	$15.50	$775.00
February 27		40	$15.75	$630.00
	Total	?		?

IV. C. (CONTINUED)
(1, 2, 3)

4. No-Phosphates maintains a soap inventory valued at $60,000. The cost of maintaining the inventory is approximately 15% of the value of the inventory. What is the approximate annual cost of carrying this inventory?

5. Cloud Publishing is shipping 150 pounds of books by air freight. The costs per 100 pounds or fractional part are: $3.10 for pickup, $10.75 for air freight, and $2.65 for delivery. A 5% federal tax is added to the air freight charge. What is the total cost to deliver the books?

6. Hyland Company is shipping 376 pounds of photographic equipment. There-Now Trucking will handle shipment. The distance is 275 miles. What is the total shipping cost?

THERE-NOW TRUCKING Class 100 Items
Basic Rates Per 100 Pounds

Weight Group (in Pounds)	Distance (in Miles)		
	1-100	101-200	201-300
0-500	$4.23	$5.20	$6.18
501-1000	$3.55	$4.43	$5.10

IV. D. (1, 2)

CONTENT: The Operation of the Small Business, Practices

OBJECTIVE: The student will be able to develop, read and apply codes, and solve problems relating to bankruptcy.

ACTIVITIES: Solve the following problems.

1. Write each price in code, using the indicated code. Omit the decimal points.

Code Word	Repeater	Price		
		a	b	c
DeQuincy, La.	(None)	$3.95	$75.80	$4.00
Bankruptcy	x	$1.13	$ 3.87	$0.55

2. Sonny declared bankruptcy and his creditors are being paid their claims at the rate of 42.2 cents on the dollar. How much will a creditor receive on a claim of $827.50?

3. Pat went into bankruptcy owing the creditors below:

Sears	$ 875.25
A & A Supply	$ 1,270.00
General Motors	$10,310.00
Tom's Wholesale	$ 5,682.00

The cash distributed to these creditors was $539.77. How much did each creditor receive?

V. A. (1,2,3, 4,5,6, 7,8)

CONTENT: The Problems of Business, Business Cost

OBJECTIVE: The student will be able to solve problems relating to office cost.

ACTIVITIES: Solve the following problems.

1. Tedrow Farm Equipment rents warehouse space at an annual rate of $3.45 per square foot. Tedrow's warehouse measures 185 feet by 150 feet. What is the monthly rental charge?

2. Motel Nine hired three high school students to clean its swimming pool. Each student worked for 2.5 hours at an hourly rate of $3.90. The materials charge was $18.54. What was the total charge for this service?

3. Fonda Imports, Inc. pays a basic monthly charge of $34.95 for telephone service. The charge includes 110 outgoing local calls. Each additional outgoing local call costs $.09. Last month, a total of 184 outgoing local calls were made from Fonda imports. A 2% federal tax was added to the bill for the month. What was the total cost of telephone service for the month?

4. The Batson Corporation uses 18,500 kilowatt-hours of electricity with a peak load of 120 kilowatts in April. The demand charge is $3.12 per kilowatt. The energy charge per kilowatt-hour is $.08 for the first 10,000 kilowatt-hours and $.06 for all kilowatt-hours over 10,000. The fuel adjustment charge is $.04 per kilowatt-hour. What is the total cost of electricity for the Batson Corporation for April?

5. Office paper cost $5.10 per ream when bought individually. When bought by the case (10 reams) it cost $4.60 per ream.

   a) What is the cost of 45 reams of paper when bought individually?

   b) What is the savings per ream when buying by the case?

V. A. (CONTINUED)
(1,2,3,
4.5,6,
7,8)

6. What is the total cost of equipping an office with the following equipment?

1 Desk	$399.95	1 Typewriter	$525.00
1 Chair	$ 79.50	1 Calculator	$150.00
1 File	$101.12	1 Desk Tray	$ 12.00
1 Lamp	$ 34.75	1 Address Book	$ 2.75

7. A secretary is paid $5.25 per hour. In addition, she receives 20% of her cash salary in fringe benefits. She works 40 hours per week.

   a. What is her cash salary for the week?

   b. What is her total gross wage including benefits?

8. Clyde Bailey is opening a branch tax office for four months. He plans to rent this furniture at a monthly charge of 9% of the list price plus a 4% tax.

Item	List Price
2 Desks	$247.95 each
2 Desk Chairs	$ 47.95 each
4 Guest Chairs	$42.45 each
1 File Cabinet	$74.95
1 Bookcase	$97.50

   What is the total rental cost for the furniture?

9. National Industries, Inc. hired a consultant from the Besecker Engineering Firm to help develop a new engine. The consultant's fee was 11.5% of the cost of the project. The project cost $975,000. What was the total cost of the consultant's services?

10. The advertising for Countryside Cereal includes these commercials:

Number	Length	Time
5	10-Second	Daytime
4	30-Second	Prime Time
2	60-Second	Prime Time

V. A. (CONTINUED)
(1,2,3,
4,5,6
7,8)

Costs for 30-second commercials are $8,000 for daytime and $28,645 for prime time. The cost of a 10-second commercial is one half the cost of a 30-second commercial. The cost of a 60-second commercial is two times the cost of a 30-second commercial. What is total advertising cost?

11. Contact your local insurance agents and determine the cost of various types of insurance for a small business. Report on the findings to your class.

V. B. CONTENT: The Problems of Business, Partnership, Partnership Income

OBJECTIVE: The student will be able to solve problems relating to distribution of partnership income.

ACTIVITIES: Solve the following problems.

1. In the partnership of Theriot and Richard, a net profit of $22.700 for one year is to be divided between the partners in the following manner: Theriot is to be allowed an annual salary of $9,600 and Richard, $7,800; and the remainder of the net profit is to be shared equally. On this basis, Theriot's total share of net profit is _____; Richard's total share is _____.

2. Nash and Weldon entered into a partnership, investing $10,000 and $7,500, respectively. The agreement provided for equal sharing of profits after 6% interest is paid each partner on invested capital. The business earned $6,400 for the year. Find each partner's share of the profits, including interest on his investment.

3. Two partners, Meaux and Jones, invested $10,000 and $15,000, respectively, in a business. The partnership agreement provided for profit sharing according to the original investment. How much is each partner entitled if the profit for 1 year amounted to $7,500? _____

V. C. CONTENT: The Problems of Business, Corporation Income

OBJECTIVE: The student will be able to solve problems relating to distribution of corporate income.

ACTIVITIES: Solve the following problems.

1. The GN Bank, whose capital stock consists of 50,000 shares, paid a dividend of $63,500. What was the rate per share?

2. The Stein Corporation, whose capital stock is $500,000, has a net income of $74,000 for one year. What rate of dividend may be declared if the entire net income is to be distributed to the stockholders?

3. A corporation has 9,500 shares of outstanding stock at $100 each. The corporation made a profit of $114,000. The directors voted that 75% of the profits should be paid as dividends.

   a) What was the dividend rate per share, as a percent?

   b) What was the amount of the dividend in dollars per share?

VI. A. CONTENT: The Manufacturer, Cost

OBJECTIVE: The student will be able to solve problems pertaining to cost of manufacturing goods.

ACTIVITIES: Solve the following problems.

1. For November, the manufacturing costs of Thom-Richard Company were: raw materials, $25,371; direct labor, $33,640; factory expense, $5,200. What was the total factory cost?

2. A power drill costing $1,500 decreases in value each year at the rate of 9% on the original cost. Find the estimated value of the drill at the end of the fifteenth year.

3. The four departments of the Tallis Company occupy floor space as follows:

Shop A	2,800 sq. ft.	Assembly Room	2,200 sq. ft.
Shop B	2,000 sq. ft.	Shipping Room	1,500 sq. ft.

The annual rent of $8,000 is to be distributed on the basis of floor space to each department. What should be charged to each department?

4. The insurance on equipment of the Biogas Clothing Manufactory amounts to $1,000 per year and is distributed in proportion to the valuation of equipment in each department. This valuation is:

Department A	$15,000	Department C	$5,000
Department B	$ 3,000	Department D	$2,000

How much should be charged to each department?

VI. B. CONTENT: The Manufacturer, Pricing Articles

OBJECTIVE: The student will be able to solve problems pertaining to pricing goods.

ACTIVITIES: Solve the following problems.

1. A hat that the manufacturer sells for $4.20 has the following manufacturing costs: material $1.14; labor $1,29; factory overhead $ .51. What is the manufacturer's gross profit on each hat?

VI. B. (CONTINUED)

2. A manufacturer sells a radio for $89.95, his factory costs are: material $23.40; labor $27.50; overhead $9.49. He estimates the selling and administrative expenses at 16% of the selling price. Find the net profit.

3. The total cost of producing and selling a TV is $329.00. At what price must the manufacturer sell each TV in order to make a 15% profit on the selling price?

VII. A. CONTENT: Taxes, Property

OBJECTIVE: The student will be able to solve problems pertaining to property taxes.

ACTIVITIES: Solve the following problems.

1. Find the tax rate in each problem. Show the tax rate as a decimal correct at five places.

	Assessed Valuation	Total Tax
a)	$5,000,000	$260,000
b)	$4,400,000	$181,500
c)	$7,580,000	$132,650

2. Find the amount to be raised by property tax and tax rate. Show the rate as a decimal.

	Assessed Valuation	Total Budget	Other Income	Raised by Property Tax	Tax Rate
a)	$10,250,000	$548,600	$52,500		
b)	$ 9,375,000	$495,000	$15,000		

VII. B. CONTENT: Taxes, Sales and Excise

OBJECTIVE: The student will be able to solve problems pertaining to sales and excise taxes.

ACTIVITIES: Solve the following problems.

1. For the period ending January 27, Mull used 6,400 cubic feet of gas at the average price of 23¢ per 100 cubic feet. A local sales tax of 6% was added to the bill. What was Mull's total gas bill?

2. The Radio Shoppe's telephone charges for April were $22.50 for regular service, $35.78 for long distance calls and $5.75 for an extension phone. A federal excise tax of 2% and a sales tax of 7% were added to the bill. What was the store's total bill?

VII. C. CONTENT: Taxes, Social Security

OBJECTIVE: The student will be able to solve problems pertaining to the FICA tax on net earnings.

ACTIVITIES: Solve the following problem.

1. Find the FICA tax on each weekly wage. Each is fully taxable. Use a rate of 6.13% and round the tax to the nearest cent.

   a) Tina Cooper $160.00

   b) Tim Jones $250.00

   c) Irene Smith $318.10

VII. D. (1,2,3 4,5,6, 7) CONTENT: Taxes, Federal Income Tax

OBJECTIVE: The student will be able to complete a Form 1040A, single and married, filing jointly.

ACTIVITIES: Solve the following problems.

1. Last year Rita Bono earned a salary of $10,200 and commissions of $205. She received $115 interest on a savings account, and $300 in bonuses. What was her gross income?

2. Tom Jones is unmarried. His adjusted gross income for the year is $21,000. His excess deductions are $800. He has only his own exemption of $1,000. Find the taxable income.

3. Students are to complete a Form 1040A, filing singly, using information provided by the teacher.

4. Students are to complete a Form 1040A, married, filing jointly, using information provided by the teacher.

*OPTIONAL

VIII. A. CONTENT: Stock; Total Investment

OBJECTIVE: The student will be able to solve problems involving total investment.

ACTIVITIES: Solve the following problems.

Corporation	No. of Shares	Cost Per Share	Cost of Stocks	Commission	Total Paid
AuGlo	100	$\$ 7\frac{3}{4}$		\$ 21.35	
Peasley Co.	1000	$\$30\frac{1}{2}$		\$150.25	
TCN Br.	500	$\$23\frac{1}{4}$		\$118.13	
HM Co.	250	$\$59\frac{5}{8}$		\$147.50	

VIII. B. CONTENT: Stock; Stock Quotation

OBJECTIVE: Students will be able to read the daily stock quotation tables.

ACTIVITIES: Using the daily stock quotations in your local newspaper, follow the daily stock quotation of a particular stock and report on each change for one week.

VIII. C. CONTENT: Stock; Stock Income and Profit

OBJECTIVE: Students will be able to calculate the total income and total profit on a given stock.

ACTIVITIES Solve the following problem.

1. Charlene Simpson owns 300 shares of Beegan Labs. The purchase price was \$71.375 per share. The dividends were \$3.50 per share. What were her annual dividends? What is the annual yield?

VII. D. CONTENT: Stocks, Sales of Stocks

OBJECTIVE: Students will be able to calculate the loss or gain on the sale of stocks.

ACTIVITIES: Solve the following problem.

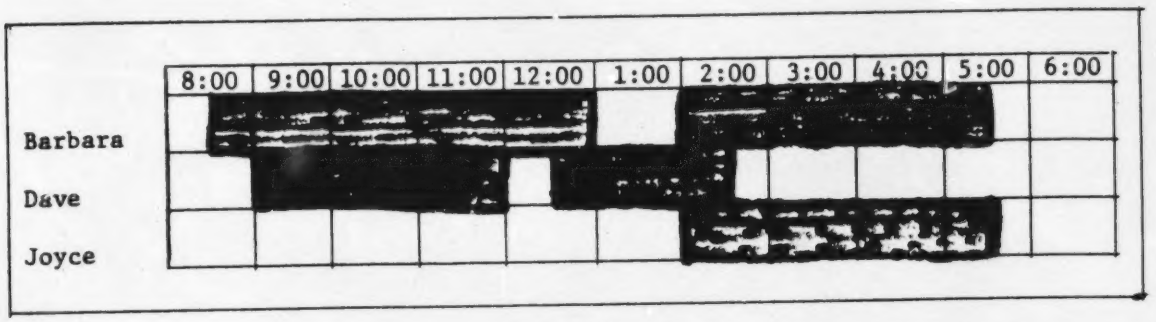
Find the profit or loss in each of the following:

Name of Stock	Shares Traded	Purchase Price	Commission on Purchase	Selling Price	Commission and Taxes on Sale
Coca Cola Bottling Co.	100	6	$25	$8\frac{5}{8}$	$35.00
International Harvester	200	29	$103	$27\frac{1}{2}$	$52.50

Copyfax Center: A Simulation

You are the manager of Copyfax Center, a small business that does copying, printing, and word processing.

Copyfax Center has three employees. Here is your chart of the hours they work each day. Monday through Friday.



Each week you make up the weekly payroll. Each employee must pay 6.13% for FICA and 5% for state tax. You pay employees time and a half for overtime.

Use these worksheets to calculate this week's net pay for each employee. Use the tax tables on pages 468-469 to determine the Federal Income Tax (FIT). This week Barbara worked three hours overtime. Dave and Joyce did not work overtime.

Employee	Hourly Pay	Hours Worked		Gross Pay
		Regular	Overtime	
Barbara Luna	$7.30			
Dave Elwood	$6.35			
Joyce Tazzi	$3.50			

Employee	Status	FIC	FICA	State Tax	Health Insur.	Total Ded.	Net Pay
Barbara Luna	Married 3 Allow.				$4.50		
Dave Elwood	Single 2 Allow.				$3.50		
Joyce Tozzi	Single 1 Allow.				--		

Pricing:

The price that Copyfax Center charges for copies depends on the number of copies made. This chart shows the current prices.

Number of Copies	Price Per Page*
1-24	$.05
25-49	$.035
50-99	$.03
100-199	$.026
200-499	$.022
Over 500	$.019

*Plus 5% Sales Tax

Regular customers get discounts. A few receive a trade discount of 30%. Others get a cash discount of 2% if they pay within 10 days. Both discounts are deducted before the sales tax is calculated.

Use these invoices to calculate the prices charged these customers.

COPYFAX CENTER	Invoice No. 2257 Date June 15, 19-
Customer	Christine's Hardware
Number of copies	600
Price per page	$
Total price	$
Discount: ____% X trade ___ cash	$
Net price	$
Sales tax	$
Invoice price	$

COPYFAX CENTER	Invoice No. 2289 Date June 17, 19-
Customer	Mike's Travel Service
Number of copies	137
Price per page	$
Total price	$
Discount: ____% ___ trade X cash	$
Net price	$
Sales tax	$
Invoice price	$

Depreciation:

Depreciation of Copyfax Center's equipment is considered a business expense.

Use this worksheet to calculate the depreciation of these items, using the staight-line method.

	Copier	Word Processor	Typewriter	Delivery Van
Year Purchased	1982	1983	1981	1982
Original Cost	$8,500	$7,500	$975	$11,248
Salvage Value	$1,000	$750	$225	$1,600
Total Depreciation				
Estimated Life	5 Yrs	5 Yrs	6 Yrs	6 Yrs
Annual Depreciation				

As part of your long-range planning, you decide to calculate how much each item will be worth each year.

Use this worksheet to calculate the value of each item in each of the years listed. (If Copyfax Center does not own an item one year, write "N/A" for Not Applicable.) Then calculate the total value of Copyfax's equipment for each year.

Year	Copier	Word Processor	Typewriter	Delivery Van	Total Value
1982					
1983					
1984					
1985					
1986					
1987					

Balance Sheet:

Each month you prepare a balance sheet. The balance sheet lists Copyfax Center's assets (what it owns), its liabilities (what it owes), and the owner's equity (assets minus liabilities).

You start by listing your assets and liabilities in a running account like this:

Copyfax Center	June 20, 19__
Cash on hand	$1,400
Accounts receivable	$5,000
Accounts payable	$6,000
Equipment (less accumulated depreciation)	$9,260
Supplies (paper, etc.)	$1,275
Prepaid insurance (3-year policy)	$1,800
Miscellaneous assets	$ 520
Taxes owed	$50

Use this form to complete Copyfax Center's balance sheet. Enter the assets and liabilities from your running account.

COPYFAX CENTER
Balance Sheet June 30, 19___

ASSETS		LIABILITIES	
	$		$
		Total Liabilities	
		Owner's Equity	
Total Assets		Total Liabilities and Equity	

Income Statement:

Each month you also prepare Copyfax Center's income statement. Here are the sales and expenses you have recorded during this month.

COPYFAX CENTER		JUNE 19__	
Wages	$2,125	Insurance	$50
Advertising	$135	Taxes	$18
Delivery	$72	Depreciation	$333
Postage	$38	Supplies	$936
Rent	$350	Gross Sales	$5,300
Utilities	$70	Sales Discounts	$672

Use this form to prepare an income statement.

COPYFAX CENTER Income Statement for Month Ended June 30, 19___	
Income: Gross Sales	
Less Sales Discounts	
Net Sales	
Expenses:	
Total Operating Expenses	
NET INCOME	

Annual Report and Comparative Analysis:

At the end of each year, you prepare an annual income statement. You can then compare Copyfax Center's finances for two years, in order to plan for next year.

This chart shows Copyfax Center's income and expenses for last year and this year. Fill in the missing numbers. Then, for each amount, calculate the percent increase from last year to this year.

COPYFAX CENTER Annual Income Statement		Last Year	This Year	Percent Increase
Income:	Gross Sales	$63,000	$79,600	
	Less Sales Discounts	8,000	10,100	
	Net Sales			
Expenses:	Wages	24,746	33,548	
	Advertising	1,575	3,700	
	Delivery	825	1,040	
	Postage	463	565	
	Rent	4,200	4,500	
	Utilities	945	1,130	
	Insurance	600	600	
	Taxes	214	250	
	Depreciation	4,000	4,000	
	Supplies	11,239	13,850	
	Total Operating Expenses			
NET INCOME				

Complete the following statements comparing last year's and this year's figures. The expense with the largest percent increase was _____. The next largest was _____. Net sales increased by _____%, total operating expenses by _____%, and net income by _____%.

The Bottom Line

What would you do differently next year to improve Copyfax Center's financial picture?

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Lange, Walter H., Robert D. Mason and Temolion G. Rousos. Business Mathematics. Boston: Houghton Mufflin Co. 1981. 497 pp.

Rosenberg, Robert and Harry Lewis. Business Mathematics, New York; Gregg Publishing Division, McGraw Publishing Company, Inc., 1958. 560 pp.

Saake, Thomas F. Business and Consumer Mathematics. Menlo Park, California: Addison-Wesley Publishing Company, Inc., 1977. 433 pp.

Resource Material

"The How & Why of Banking" prepared by the California Bankers Association

Income tax information packet - Federal Government

Copyfax simulation included.